

ARNOLD ARBORETUM  
HARVARD UNIVERSITYBULLETIN  
OF  
POPULAR INFORMATION

JAMAICA PLAIN, MASS.

MAY 29, 1925

**Horsechestnuts and Buckeyes.** These are the English names of the species of the genus *Aesculus* which are widely distributed in the northern hemisphere, with one species in southeastern Europe, two in northern India, two in China, one in Japan, one in southern California, and seven with numerous varieties and hybrids in the southeastern United States. The Arboretum Collection is a good one but the Indian, one of the Chinese, the Californian, and one of the eastern North American species have not proved hardy here. It is arranged on the valley road beyond the Lindens, and many of the plants are now in flower. Horsechestnuts and Buckeyes differ in the presence of a resinous covering on the winter buds of the Old World and Californian species (Horsechestnuts) and in its absence from those of the other American species (Buckeyes). The European species (*Aesculus Hippocastanum*), a native of the mountains of Greece, is when in flower one of the most splendid trees which can be grown in the northern states when it can be planted in deep, rich, damp but well drained soil remote from the dust and dirt of large cities. This tree was first cultivated in England in 1633, having probably been sent there from Constantinople. The first knowledge we have of it in the United States was on April 18, 1746, when seeds were received by John Bartram of Philadelphia. There is now no evidence that it was planted at Mt. Vernon by Washington, who was a constant visitor at Bartram's garden, and the Arboretum does not know of any very large or old trees in the neighborhood of Philadelphia or New York. The handsomest Grecian Horsechestnut seen in the United States by officers of the Arboretum is in a garden in Salem, Massachusetts. This tree was planted one

hundred and ten years ago and is now seventy feet high with a trunk ten feet in girth and a perfectly shaped head eighty feet across. There are several varieties of the Grecian Horsechestnut in cultivation but none of them grow to such a large size or are as handsome in habit or in their flowers as the original tree. The double flowers of one of these abnormal varieties, however, have the advantage of lasting longer on the tree before fading. Among the red- and pink-flowered Horsechestnut trees, hybrids of *A. Hippocastanum* and a red-flowered American Buckeye, probably *A. Pavia*, are often handsome trees. The best known of these hybrids, *A. carnea*, which originated a good many years ago in Europe, is now a common tree in the suburbs of Boston. More conspicuous is a form of that tree with deep red flowers known in nurseries as *Aesculus Briottii* which was first raised in France. The trees in the Arboretum of this variety are now full of flowers.

***Aesculus turbinata***, the Japanese Horsechestnut, first introduced into the Arboretum in 1881, is in Japan a magnificent tree, often growing to the height of eighty or ninety feet and forming a tall trunk occasionally seven feet in diameter. Like the European Horsechestnut, the leaves are composed of seven leaflets but these are thinner and more lustrous and the leaf-stalks are longer. The Japanese tree in summer therefore appears less dark and massive than the Grecian species. The flower-clusters are narrower and the flowers, which are white with scarlet marking at the base of the petals, are handsomer. *Aesculus turbinata*, which grows to its largest size in central and northern Japan, is hardy in New England.

**Eastern American Horsechestnuts** and their hybrids are interesting trees but have none of the splendor when in flower which gives so great value to the European species and some of its hybrids. The largest American specimens in the Arboretum are two trees of the Ohio Buckeye (*A. glabra*) close to the left hand side of the South Street entrance. These are among the oldest trees planted in the Arboretum as they were raised from seeds gathered in Ohio in 1873. Several of the self-sown seedlings of these trees are now flowering in the general collection on the right hand side of the Meadow Road. The var. *Buckleyi* of *A. glabra* is the first of the Buckeyes to bloom in the Arboretum. This is a rare tree most abundant in Jackson County, Missouri, and is distinguished by the seven instead of the five leaflets. A little later to flower than the typical plant is the variety *leucodermis*, distinguished by its smooth pale bark and glabrous leaves pale green or glaucescent below. This is the common form in southern Missouri, Arkansas and probably Oklahoma. A related species, *A. arguta*, is now covered with its yellow flowers; this is a small narrow shrub tree-like in habit but only a few feet tall which has been found in west central Oklahoma and in a few places in northern and central Texas. This should prove an excellent May and June flowering shrub for small gardens. *Aesculus georgiana* is covered again with its compact clusters of large red and yellow flowers, and is certainly one of the best of the plants which have been brought into our gardens in recent years by the Arboretum. When first discovered it was believed to be confined



to the neighborhood of Stone Mountain in central Georgia and always to be shrubby in habit. It is now known to range northward in the Piedmont region of North Carolina and to grow into a small tree, and the oldest plants in the Arboretum are beginning to assume a treelike habit. *Aesculus discolor* var. *mollis* is also well covered with flowers. The type of this species has red and yellow flowers, but in the variety *mollis*, which is the only form in the Arboretum, the whole flower is bright scarlet. It is a common plant from northern Georgia to central Alabama, and westward to the valley of the Guadalupe River in Texas, ranging west of the Mississippi River northward to southeastern Missouri, and appearing in southwestern Tennessee. In the southern states no other plant is more brilliantly conspicuous, and its unexpected hardiness in New England is an important discovery. *A. Harbisonii*, which is a hybrid of *A. discolor* var. *mollis* and *A. georgiana*, is the last of the Buckeyes, with the exception of *A. parviflora*, to bloom in the Arboretum and probably will not open its flowers for a couple of weeks. It is a shrub with broad clusters of large flowers each with a rose-colored calyx and canary yellow petals tinged with rose toward the margin. Still extremely rare, it deserves to be better known. *Aesculus woerlitzensis* is a plant of doubtful origin with red and yellow flowers, of which there are a number of handsome young specimens in the collection. It came originally from Europe and it is not certain whether it is a hybrid or a species. Where it grows naturally, if it is a species, is still unknown. Perhaps the handsomest of the hybrid Buckeyes raised in Europe is one to which the name of *A. mutabilis penduliflora* has been given. This is a shapely young tree with narrow leaflets and drooping red and yellow flowers which was presented in 1902 to the Arboretum by the Späth Nursery in Berlin. It is considered to be a hybrid of *A. discolor mollis* and *A. neglecta*, another hybrid.

**American deciduous-leaved Magnolias.** Several of these trees are in bloom in the group on the right hand side of the Jamaica Plain entrance. Unlike most of the Asiatic species, American Magnolias flower after the appearance of the leaves; they are hardy and handsome trees. One hundred and fifty years ago letters of English plant lovers written to their American correspondents contained many appeals for Magnolia plants and seeds, and one hundred years ago these trees were to be found in the principal collections of plants in the middle states. They are scarcely known to the present generation, and it is only in a few American nurseries that an occasional plant of one of the species can be found. There are six of these Magnolias but one of them, *M. pyramidata*, grows only in the extreme southeastern corner of Alabama and adjacent Florida and would not be hardy here. Of the other species the so-called Mountain Magnolia, *M. Fraseri*, is the first to open its flowers in the Arboretum. It is a small tree rarely more than forty feet high, with an open head of long branches, leaves often a foot in length and deeply divided at the base, and creamy white, sweet-scented flowers eight or ten inches in diameter and very conspicuous as they stand well above the crowded leaves at the end of the branches. This tree is a native of the southern Appalachian region, and is perfectly hardy in eastern Massachusetts. The next to flower is *M. cor-*

*data* which for several days has been covered with cup-shaped, bright canary yellow flowers unlike in color those of any other *Magnolia*. This tree was discovered by the French botanist and traveler Michaux on one of his journeys from Charleston, South Carolina, up the valley of the Savannah River and was introduced in French gardens by him. For more than a century every attempt to rediscover this tree failed, and it is only within the last ten years that it was found by the Berckmans brothers growing in the woods not many miles distant from Augusta, Georgia, where plants only a few feet high flower profusely. Grafts from Michaux's trees preserved this species in cultivation, and the large plants in the Arboretum were raised from grafts taken from old trees in the Harvard Botanic Garden for which they were imported from Europe when the Garden was laid out, that is more than a century ago. With these species bloom the Umbrella-tree, *M. tripetala*, a bushy tree thirty to forty feet high with large pure white flowers, widely distributed in the Appalachian Mountain region, but nowhere very abundant, from the valley of the Susquehanna River in Pennsylvania to southern Alabama, middle Kentucky and Tennessee, growing westward to southwestern Arkansas and southeastern Oklahoma; and the Cucumber-tree, *M. acuminata*, the tallest of the American *Magnolias*, sometimes ninety feet high, with green or greenish yellow flowers covered with a glaucous bloom. This fine tree is a native of mountain slopes and rocky banks of streams from southern Ontario and western New York, to Ohio, Indiana, and Illinois and along the Appalachian Mountains to northern Georgia and to central Kentucky and Tennessee, northern Alabama, Mississippi and Louisiana. It is the largest and most widely distributed of the American *Magnolias*, and grows to its largest size at the base of the high mountains of the Carolinas and Tennessee. Later *Magnolia macrophylla* and *M. virginiana* will bloom. The first has the largest leaves and the largest flowers of any North American tree, and the latter, which is perhaps the most attractive of the group, has the smallest flowers. The size, however, is made up by their delightful fragrance and by the beautiful leaves lustrous above and silvery white below which remain late on the branches. As they flower attention will be called later to these two species.

**The Way to grow Wisterias.** Wisterias which do not climb naturally are usually supported on trellises or grown on rods or frames attached to buildings. This means that they have to be more or less pruned every year and in this way lose much of their flowering wood and often have a stiff and unnatural appearance. How to grow them naturally can be seen from a plant of the white Japanese Wisteria growing close to the Centre Street gate of the Arboretum. This was planted many years ago in what was then a nursery and has been allowed to grow naturally over some tall bushes close to the drive into the Arboretum; it now extends over a large area and this year, as in many past seasons, the whole plant is loaded down with its long racemes of flowers. It is now one of the most beautiful and interesting objects in the Arboretum, and well worth the attention of all persons who like to see plants growing naturally and as they grow in their native countries as wild plants.